

No.

7700080



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ferry-Morse Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (U.S.C. 42, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Golden Rod'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 22nd day of June in
the year of our Lord one thousand nine
hundred and seventy-eight

Attest:

Samuel R. Lee
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

B. B. Dargatzis
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION Golden Rod		2. KIND NAME Snap Bean		FOR OFFICIAL USE ONLY PV NUMBER 7700080	
3. GENUS AND SPECIES NAME <u>Phaseolus vulgaris</u> L.		4. FAMILY NAME (Botanical) Leguminosae		FILING DATE 6-27-77	TIME 1:00 P.M.
		5. DATE OF DETERMINATION 8 August 1973		FEE RECEIVED \$ 250.00	BALANCE DUE 6-27-77
				\$ 250.00	6-27-77
				\$ 250.00	5-19-78
6. NAME OF APPLICANT(S) FERRY-MORSE SEED COMPANY Dr. George C. Emery, Breeder		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 111 FERRY-MORSE WAY P.O. Box 100 Mountain View, California 94040		8. TELEPHONE AREA CODE AND NUMBER (415) 967-6973	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. STATE OF INCORPORATION California		11. DATE OF INCORPORATION 7 April 1969

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

**Mr. D.V. Brondyke, Executive Vice President
Ferry-Morse Seed Company
111 Ferry-Morse Way, P.O. Box 100
Mountain View, California 94040**

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Botanical Description of the Variety
- ☒ 13C. Exhibit C, Objective Description of the Variety
- ☒ 13D. Exhibit D, Data Indicative of Novelty
- ☒ 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☐ YES ☐ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

18 May 1977
(DATE)

(DATE)

Ferry-Morse Seed Company
by: **D.V. Brondyke**
Executive Vice President
(SIGNATURE OF APPLICANT)
(SIGNATURE OF APPLICANT)

3 May 1977

VARIETY: Golden Rod (formerly E4221 (formerly 1C-120 (formerly CW 198(C)6(W)Ms))).

EXHIBIT A: Origin and Breeding History of the Variety.

Golden Rod was selected as a single plant selection involving the pedigree method of breeding from the variety Sungold (formerly CW 198 and released as Sungold in February, 1973 from the New York State Agricultural Experiment Station, Geneva, New York).

The initial selection was among 9 single plant selections taken from a trial row of CW 198 at San Juan Bautista, California, in the summer of 1971. The S₁ progeny row of CW 198(C)6 was evaluated at Columbus, Wisconsin in 1972, and appeared to exhibit longer pods and a more uniform light wax color than CW 198. Seeds from these S₁ plants were massed together for the S₂ generation, (CW 198(C)6(W)Ms).

S₂ seed (CW 198(C)6(W)Ms) was planted in progeny rows for testing in comparison to CW 198 in Oregon and New York plantings and for seed increase in California in the summer of 1973. The longer pod length of CW 198(C)6(W)Ms in comparison to Sungold continued to be expressed. The decision to increase the line as a possible new variety was made on August 8, 1973. Seed from the S₂ plants in California were massed and designated as 1C-120.

S₃ seed (1C-120) was further evaluated in trial rows in Wisconsin, New York, and Oregon, while being increased to the S₄ generation in Florida, in 1974. In all locations the line performed outstandingly well in comparison to present commercial varieties. In the Florida S₄ increase, 3 flat and 1 oval flat podded plants were rogued from 1000 plants. However, no off types were found in 7500 plants in California in the summer of 1974.

The line was considered for commercial testing in 1975 and re-designated as the experimental line E4221. Outstanding trial reports were obtained from a pilot commercial planting in Eugene, Oregon, by the Agripac Growers Coop., and from the New York State Agricultural Experiment Station Snap Bean Trial in Geneva, New York.

E4221 was named Golden Rod in the spring of 1976.

3 May 1977

VARIETY: Golden Rod (formerly E4221 (formerly 1C-120 (formerly CW 198(C)6(W)Ms))).

EXHIBIT B: Botanical Description of the Variety.

Seed germination and emergence are moderately rapid; early seedling growth is vigorous. Time of flowering is one day later than Resistant Kinghorn Wax and the same as Earliwax. Pods attain their mature diameter in the same number of days from planting as Earliwax.

Plants are determinate, bush, medium tall (29 to 48 cm.) with a medium spread (31 to 55 cm.). The mature plant is approximately 4 cm. taller and wider than Earliwax with a similar foliage color. The leaves are deltoid ovate, acuminate, with rounded or truncate bases. Leaves are medium in size, but larger than Earliwax. Stems and leaves are slightly pubescent. Inflorescences arise from the apex and leaf axils and contain 4 to 8 white flower buds. Pods are borne medium to high on the plants and only infrequently touch the soil surface.

Pods are stringless, 13 to 17 cm. in length, round to slightly round oval, 11 mm. in width (suture to suture), and 12 mm. in thickness. Spur length is 14 mm. The pod surface is smooth and only slightly pubescent. Pod color is a medium light lemon yellow wax. Compared to Earliwax, the pods are slightly longer, have a larger mature pod diameter, are more oval in shape, have a longer spur, and are a slightly lighter wax color.

Seed are white, oblong, oval in cross-section; compared to Earliwax, the seed are slightly wider and not as thick.

FORM GR-470-12
(11-15-72)UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782EXHIBIT C
(Bean)OBJECTIVE DESCRIPTION OF VARIETY
BEAN (*PHASEOLUS VULGARIS*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) FERRY-MORSE SEED COMPANY	FOR OFFICIAL USE ONLY
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) 111 FERRY-MORSE WAY P.O. BOX 100 MOUNTAIN VIEW, CALIFORNIA 94040	PVPO NUMBER 7700080
	VARIETY NAME OR TEMPORARY DESIGNATION GOLDEN ROD

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g. 089 or 09) when number is either 99 or less or 9 or less.

1. TYPE:

<input type="text"/> 1	1 = SNAPBEAN	2 = GREEN SHELL	3 = DRY EDIBLE	4 = MULTIPURPOSE
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2. SEASON AND REGION OF ADAPTABILITY IN THE U.S.:

<input type="text"/> 2	Grows best during:	1 = SPRING	2 = SUMMER	3 = FALL	4 = WINTER
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<input type="text"/> 6	Best adapted in:	1 = NORTHWEST	2 = NORTHCENTRAL	3 = NORTHEAST	4 = SOUTHEAST
		5 = SOUTHWEST	6 = MOST REGIONS		

3. MATURITY (Days from seeding to first harvest):

<input type="text"/> 5 <input type="text"/> 2	GREEN PODS	<input type="text"/> - <input type="text"/> - <input type="text"/>	GREEN SHELLS	<input type="text"/> - <input type="text"/> - <input type="text"/>	DRY SEEDS
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<input type="text"/> 0 <input type="text"/> 1	NO. DAYS EARLIER THAN -----	<input type="text"/> 3	1 = TENDERCROP 2 = KENTUCKY WONDER 3 = KINGHORN WAX 4 = WHITE KIDNEY 5 = MICHELITE 62 6 = DWARF HORTICULTURAL 7 = BUSH BLUE LAKE 8 = OTHER (Specify)
<input type="text"/> 0 <input type="text"/> 0	NO. DAYS LATER THAN -----	<input type="text"/> 7	

4. PLANT:

<input type="text"/> 1	1 = DETERMINATE, ERECT BUSH	2 = DETERMINATE, SPRAWLING BUSH
	3 = DETERMINATE, SEMIPOLE	4 = INDETERMINATE, POLE

<input type="text"/> 0 <input type="text"/> 4 <input type="text"/> 1	CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE
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<input type="text"/> 0 <input type="text"/> 0 <input type="text"/> 5	NUMBER PRIMARY BRANCHES PER MAIN STALK
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<input type="text"/> 2	Branching habit: 1 = COMPACT 2 = OPEN
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<input type="text"/> 0 <input type="text"/> 2	CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF
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<input type="text"/> 1	Main stalk: 1 = BRITTLE 2 = WIREY <input type="text"/> 1	1. STOUT 2. THIN
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<input type="text"/> 3	Flower position:
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<input type="text"/> 3	Pod Position:	1 = LOW, CONCENTRATED	2 = HIGH, CONCENTRATED	3 = SCATTERED
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5. LEAVES:

<input type="text"/> 2	1 = SMOOTH 2 = WRINKLED	<input type="text"/> 1	1 = DULL 2 = GLOSSY	<input type="text"/> 2	Thickness: 1 = THIN 2 = MEDIUM 3 = THICK
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<input type="text"/> 2	Size: 1 = SMALL (<i>Earliwax</i>) 2 = MEDIUM 3 = LARGE (<i>Tendercrop</i>)	<input type="text"/> 9	CM. PETIOLE LENGTH (To basal leaflets of first trifoliate leaf)
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<input type="text"/> 2	Tip shape of center leaflet: 1 = ROUNDED 2 = TAPER POINTED 3 = SHARP POINTED
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<input type="text"/> 2	PUBESCENCE - Dorsal:	1 = NONE 2 = SLIGHT 3 = CONSIDERABLE
<input type="text"/> 2	PUBESCENCE - Ventral:	

<input type="text"/> 3	Color: 1 = LIGHT GREEN (<i>Bountiful</i>) 2 = MEDIUM GREEN 3 = DARK GREEN (<i>Bush Blue Lake</i>)
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6. FLOWERS:

1 Color: 1 = WHITE 2 = CREAM 3 = PINK 4 = LILAC 5 = PURPLE
6 = OTHER (Specify) _____

2 Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT 6 NUMBER FLOWERS PER RACEME

7. FRESH PODS: (Edible maturity, averages for 10 pods)

5 Color: 1 = LIGHT GREEN (Bountiful) 2 = MEDIUM GREEN (Tendergreen) 3 = DARK GREEN (Wade)
4 = LIGHT YELLOW (Brittlewax) 5 = GOLDEN YELLOW (Cherokee Wax) 6 = GREEN-RED VARIAGATED (Horticultural)
7 = OTHER (Specify) _____

1 5 CM. LENGTH 1 1 MM. WIDTH (Between sutures) 1 2 MM. THICKNESS 0 9 $\frac{\text{WIDTH}}{\text{THICKNESS}} \times 10$

4 Cross section pod shape: 1 = FLAT 2 = OVAL 3 = CREASEBACK 4 = ROUND

1 Curvature: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED 2 Pubescence: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

1 Constrictions: 1 = NONE 2 = SLIGHT 3 = DEEP 1 Spur: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

2 Surface: 1 = SHINY 2 = DULL 1 Surface: 1 = SMOOTH 2 = BLISTERED

1 Pod flesh: 1 = LIGHT 2 = DARK 1 Pod flesh: 1 = FIRM 2 = WATERY

14 MM. SPUR LENGTH 2 Suture string: 1 = PRESENT 2 = ABSENT

1 Fiber: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE 1 Seed development: 1 = SLOW 2 = MEDIUM 3 = FAST

7 NUMBER OF SEEDS PER POD 31 NUMBER PODS PER PLANT (Once over harvest)

19 NUMBER MARKETABLE PODS PER PLANT (Once over harvest) 1 Machine harvest: 1 = ADAPTED 2 = NOT ADAPTED

8. SEED COAT COLOR:

1 1 = MONOCHROME 2 = POLYCHROME 1 1 = SHINY 2 = DULL

1 Primary color: 1 = WHITE 2 = YELLOW 3 = BUFF 4 = TAN
5 = BROWN 6 = PINK 7 = RED 8 = PURPLE

0 Secondary color: 9 = BLUE 10 = BLACK 11 = OTHER (Specify) _____

0 Color pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

0 Secondary color location: 1 = HILAR RING 2 = HILAR SURFACE
3 = STROPHIOLE 4 = MICROPYLE
5 = SIDES 6 = DORSAL SURFACE
7 = NOT RESTRICTED TO ANY AREA 8 = COMBINATION OF LOCATIONS (Specify) _____

1 Hilar ring: 1 = NOT PRESENT 2 = NARROW 3 = BUTTERFLY SHAPED

2 Vein-like under coat pattern: 1 = ABSENT 2 = PRESENT

9. SEED SHAPE AND SIZE:

1 Hilum view: 1 = ELLIPTICAL 2 = OVAL 3 = ROUND 3 Side view: 1 = OVAL 2 = ROUND
3 = KIDNEY 4 = TRUNCATE ENDS

2 Cross section: 1 = ELLIPTICAL 2 = OVAL 25 GM. WEIGHT PER 100 SEEDS
3 = CORDATE 4 = ROUND

0 Classification: 1 = PEA 2 = MEDIUM 3 = MARROW 4 = KIDNEY 5 = PINTO

0 6 MM. WIDTH (Dorsal to ventral) 0 5 MM. THICKNESS (Side to side)

1 4 MM. LENGTH 0 1 2 $\frac{\text{WIDTH}}{\text{THICKNESS}} \times 10$

March 27, 1978

VARIETY: Golden Rod (formerly E4221 (formerly 1C-120 (formerly CW 198(C)6(W)Ms))).

EXHIBIT D: Data Indicative of Novelty.

Golden Rod most closely resembles the variety Sungold. It is distinct from Sungold by having a longer pod and a longer seed.

A. Measurements below were obtained from a planting made February 2, 1976 in a greenhouse held at a minimum 68° Fahrenheit at Columbus, Wisconsin.

	<u>Golden Rod</u>	<u>Sungold</u>	\bar{d}	s_d	t	p
1. Pod length *	13.39 cm.	12.47 cm.	.89	.175	5.09	<.001
2. Seed length **	13.74 mm.	12.89 mm.	.85	.223	3.81	<.001

* -- measurements are based on 30 paired comparisons.

** -- measurements are based on 47 paired comparisons.

B. The measurements below were obtained from a planting made in the field on June 3, 1976 at Columbus, Wisconsin.

	<u>Golden Rod</u>	<u>Sungold</u>	\bar{d}	s_d	t	p
1. Pod length *	16.36 cm.	15.39 cm.	.97	.348	2.79	0.025-0.010
2. Seed length **	13.95 mm.	12.92 mm.	1.05	.110	9.55	<.001

* -- measurements are based on 10 paired samples of 10 pods each.

** -- measurements are based on 130 paired comparisons.

C. The measurements below were obtained from a planting made in the field on June 14, 1977 at Columbus, Wisconsin.

	<u>Golden Rod</u>	<u>Sungold</u>	\bar{d}	s_d	t	p
1. Pod length *	14.34 cm.	13.17 cm.	1.17	.124	9.45	<.001

* - measurements are based on 200 paired samples and were limited to sieve-5 pods with no seed blanking on the pods.

EXHIBIT "E"

Plant Variety Protection Application

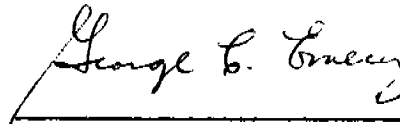
No: _____

ASSIGNMENT

I, DR. GEORGE C. EMERY, agree and hereby
do transfer and assign to FERRY-MORSE SEED COMPANY all of my rights,
title, and interest in and to that certain variety namely, _____
SNAP BEAN - GOLDEN ROD,
for which application for Plant Variety Protection Certificate has been
filed. This agreement shall be binding on my administrators, successors
and assigns.

In Witness Whereof, I have executed this agreement this
12 day of May, 1977.

BREEDER

DR. GEORGE C. EMERY

ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, HARRIS MORAN SEED COMPANY, a corporation duly organized and existing under the laws of the State of Maryland, having its principal place of business at 4511 Willow Road, Suite 3, Pleasanton, California 94588 ("Assignor"), has, pursuant to that certain Bill of Sale and Assignment dated as of June 30, 1997, transferred to FERRY-MORSE SEED COMPANY (CALIFORNIA), a corporation duly organized and existing under the laws of the State of California, having its principal place of business at 555 Codoni Avenue, P.O. Box 4938, Modesto, California 95352-4938 ("Assignee"), all of the intellectual property Assignor had adopted, used and was using as of the effective date of this Assignment, including without limitation, the intellectual property represented by the United States Plant Variety Protection Certificates of Assignor identified on Schedule A hereto (collectively, the "Property"); and

WHEREAS, on the date hereof, Assignee has changed its name to "Harris Moran Seed Company";

NOW, THEREFORE, effective by this instrument as of the close of business on June 30, 1997, and for good and valuable consideration, receipt of which is hereby acknowledged, Assignor hereby assigns to Assignee any and all right, title and interest worldwide in and to the Property and any and all recordations thereof, including, but not limited to, the use of the Property in any manner, all benefit of any and all prior use of the Property, and any and all rights to initiate claims or proceedings for past, present or future infringements of Assignor's rights, title and interest in and to the Property.

Dated: as of June 30, 1997

HARRIS MORAN SEED COMPANY

By: 

Philip Ashcraft, President

CERTIFICATE OF AMENDMENT
OF THE
ARTICLES OF INCORPORATION
OF

FERRY-MORSE SEED COMPANY (CALIFORNIA)
(a California corporation)

1450010

ENDORSED
FILED

In the office of the Secretary of State
of the State of California

JUN 30 1997

Bill Jones
BILL JONES, Secretary of State

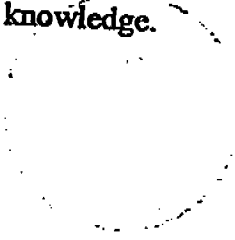
To the Secretary of State
State of California

Pursuant to the provisions of the General Corporation Law of the State of California, the undersigned officers of FERRY-MORSE SEED COMPANY (CALIFORNIA), a California corporation (the "Corporation"), do hereby certify as follows:

1. The name of the Corporation is Ferry-Morse Seed Company (California).
2. Article One of the Corporation's Articles of Incorporation, which relates to the name of the Corporation, is hereby amended in its entirety to read as follows:
 - One. The name of this Corporation is:
HARRIS MORAN SEED COMPANY.
3. The amendment herein provided for has been approved by the Corporation's Board of Directors.
4. The amendment herein provided for was approved by the written consent of the Corporation's sole shareholder in accordance with the provisions of Section 902 of the California General Corporation Law. The total number of outstanding shares of the corporation is 5,000.

IN WITNESS WHEREOF, each of the undersigned does hereby declare under the penalty of perjury that he or she signed the foregoing Certificate of Amendment as of June 30,

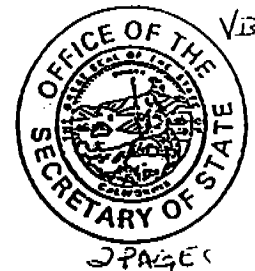
1997, in the Town of Modesto, State of California, in the official capacity set forth beneath his or her signature and that the statements set forth in this certificate are true of his or her own knowledge.


Yves Queste
Yves Queste, President

Helen Andritsakis
Helen Andritsakis, Secretary

State of California

SECRETARY OF STATE



I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the attached transcript has been compared with the record on file in this office, of which it purports to be a copy, and that it is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

JUN 30 1937



Bill Jones

Secretary of State